Dometic®

# INSTALLATION AND OPERATING INSTRUCTIONS

## RM2620

## RM2820

## REFRIGERATOR FOR LP-GAS & ELECTRIC OPERATION

### FOR YOUR SAFETY

**If you smell gas:**

1. **Open windows.**
2. **Don't touch electrical switches.**
3. **Extinguish any open flame.**
4. **Immediately call your gas supplier.**

### POUR VOTRE SÉCURITÉ

**Si vous sentez une odeur de gaz:**

1. **Ouvrez les fenêtres.**
2. **Ne touchez à aucun interrupteur.**
3. **Éteignez toute flamme nue.**
4. **Avertissez immédiatement votre fournisseur de gaz.**

### FOR YOUR SAFETY

**Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**

### POUR VOTRE SÉCURITÉ

**Ne pas entreposer ni utiliser de l'essence ni d'autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.**

### ⚠ WARNING

**Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.**

### ⚠ AVERTISSEMENT

**Une installation, un réglage, une modification, une réparation ou un entretien non conforme aux normes peut entraîner des blessures ou des dommages matériels. Lisez attentivement le mode d'emploi fourni avec l'appareil. Pour obtenir de l'aide ou des renseignements supplémentaires, consultez un installateur ou un service d'entretien qualifié ou le fournisseur de gaz.**

Dometic®


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MO-M 0609

# INTRODUCTION

Thank you for entrusting us to supply your new refrigerator which is designed for storage of foods, frozen foods and for making ice. This manual describes how to install and operate the refrigerator models RM2620 and RM2820. Read the manual carefully to ensure that you know how to operate the refrigerator safely and correctly. Be aware of possible safety hazards when seeing alert symbols on the refrigerator as well as in this manual. Installation and service is to be performed by qualified personnel only! Make sure to retain the manual for future reference.

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### SYMBOLS

The following symbols are used throughout the manual:

**⚠ WARNING** — Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

**⚠ CAUTION** — Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.

**CAUTION** — Used without the safety alert symbol indicates, a potentially hazardous situation which, if not avoided may result in property damage.

Information

Step-by-step instructions

# CERTIFICATION AND CODE REQUIREMENTS

**This appliance is certified under the latest edition of ANSI Z21.19•CSA 1.4 Refrigerators using gas fuel. The installation must conform with local codes, or in absence of local codes, the following standards as applicable.**

**In the U.S. the installation must conform with:**

- National Fuel Gas Code, ANSI Z223.1/NFPA 54 (latest edition).
- Recreational Vehicles Code, ANSI A119.2 (latest edition).
- Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280.

If an external electrical source is utilized, the refrigerator, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the National Electrical Code, ANSI/NFPA 70 - (latest edition).

**In CANADA, the installation must conform with:**

- Natural Gas and Propane Installation Code, CSA B149.1
- CSA Z240 RV Series, Recreational Vehicles.
- Current CSA Z240.4, Gas-equipped Recreational Vehicles and Mobile Housing.

If an external electrical source is utilized, the refrigerator, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the Canadian Electrical Code, CSA C22.1, Parts I and II - (latest edition).

# INSTALLATION INSTRUCTIONS

## VENTILATION REQUIREMENTS

Ventilation is one of the requirements for proper cooling unit operation. The installation should be made in such a manner as to separate the combustion system from the living space of the mobile home or recreational vehicle. Openings for air supply or for venting of combustion products should have a minimum dimension of not less than 1/4 inch.

Proper installation requires one *lower fresh air intake* and one *upper exhaust vent*. Certified installations require one *roof vent* and one *lower side vent.* The ventilation kits shown in this manual have been certified for use with RM2620 and RM2820. The table below displays the components and their part no.

| Certified vent system kits | | |
|---|---|---|
| Kit no. | Components | Part no. |
| 4A | Roof Base<br>Roof Cover<br>Lower Side Vent | 3103633.XXX*<br>3103634.XXX*<br>3109350.XXX* |

** Replace "XXX" with the color code numbers. For color codes, contact your supplier. For further information, contact your dealer or distributor.*

The ventilation kits must be installed and used without modification! An opening toward the outside at floor level in the refrigerator compartment has be provided for ventilation of heavier-than-air fuel gases. The lower vent of the recommended kits is provided with proper size openings. The flow of combustion and ventilating air must not be obstructed.

The lower side vent is fitted with a panel, which provides an adequate access opening for ready serviceability of the burner and control manifold of the refrigerator. This should be centered on the back of the refrigerator.

**NOTE!** While washing the RV - do not spray any water through the refrigerator vents.

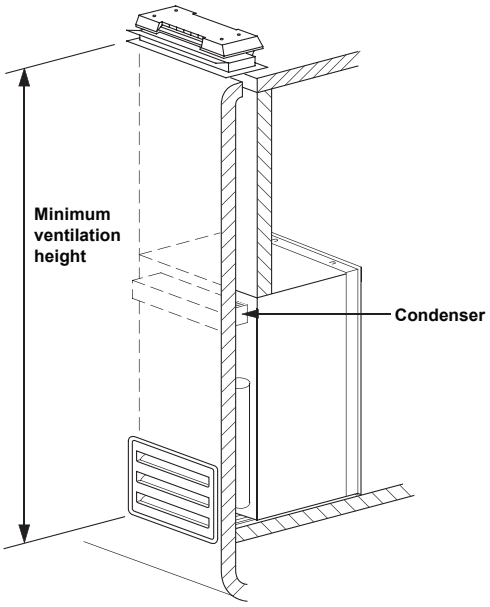
# INSTALLATION INSTRUCTIONS

## VENTILATION HEIGHTS

It is essential that all maximum or minimum dimensions are strictly maintained, as the performance of the refrigerator is dependent on adequate flow of air over the rear of the refrigerator.

| Minimum ventilation heights<br>Installation with roof vent and lower side vent | | |
|---|---|---|
| | inches | mm |
| **RM2620** | 54 | 1372 |
| **RM2820** | 60 | 1524 |

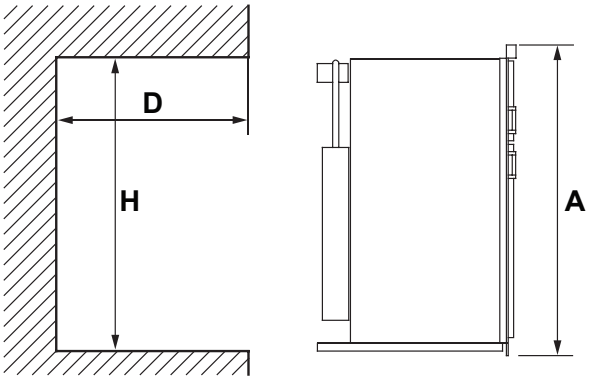
**NOTE: The upper vent should be centered over the condenser coil at the back of the refrigerator.**



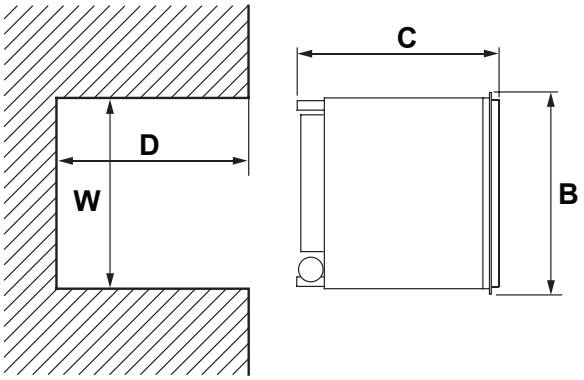

## OVERALL AND RECESS DIMENSIONS

| Dimensions / Model | | Overall | | | Recess | | |
|---|---|---|---|---|---|---|---|
| | | Height A | Width B | Depth C | Height H | Width W | Depth D |
| **RM2620** | inches | 51-31/32 | 22-23/32 | 24-9/16 | 49-17/32 | 21-13/16 | 24-3/32 |
| | mm | 1320 | 577 | 624 | 1258 | 554 | 612 |
| **RM2820** | inches | 57-7/8 | 24-39/64 | 24-9/16 | 55-7/16 | 23-11/16 | 24-3/32 |
| | mm | 1470 | 625 | 624 | 1408 | 601 | 612 |

**Side view**




**View from above**



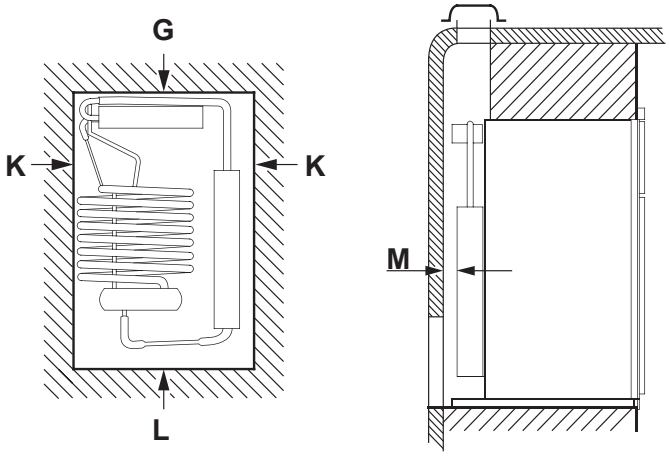
# INSTALLATION INSTRUCTIONS

## CLEARANCES

Minimum clearances (in inches) to combustible materials:

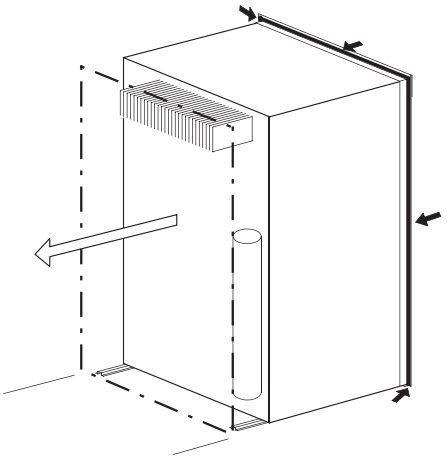
| | |
|---|---|
| Top (**G**) | 0 |
| Side (**K**) | 0 |
| Bottom (**L**) | 0 |
| Rear (**M**[1]) | 0 |

[1] M: The distance between the rearmost part of the refrigerator and the wall behind it.




## INSTALLING THE REFRIGERATOR

- Make sure the floor is solid and level.
- The refrigerator must be installed in a substantial enclosure and level.
- **NOTE!** Do not install the appliance directly on carpeting. Carpeting must be removed or protected by a metal or wood panel beneath the appliance, which extends at least full width and depth of the appliance.
- All areas within the recess have to be sealed. Verify that there is a complete seal between the front frame of the refrigerator and the top, sides and bottom of the enclosure. A length of sealing strip is applied to the rear surface of the front frame for this purpose. The sealing should provide a provide a complete isolation of the appliance's combustion system from the vehicle interior.



**NOTE!** Be careful not to damage the sealing strip when the refrigerator is put in place.

## SECURING THE REFRIGERATOR

It is important to follow the sequence in securing refrigerator in enclosure since failure in doing that can cause leakage between the frame and cabinet!

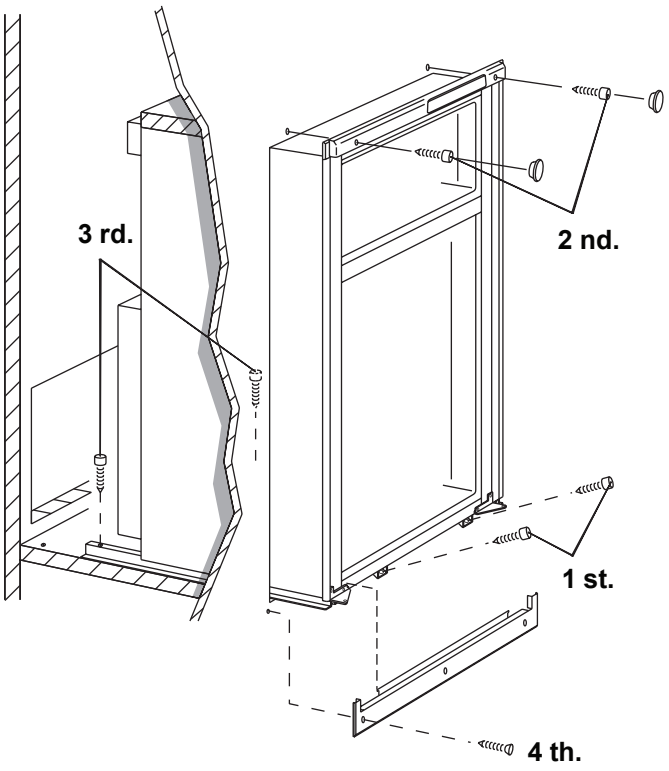
Plastic caps are provided to cover the screw holes in the top decoration.

Any space between the counter, storage area or ceiling and top of the refrigerator greater den 1½ inches should be blocked. The heat produced at the rear of the refrigerator will become trapped in this space, making the top of the refrigerator hot and reduce the efficiency of the refrigerator.

After the refrigerator has been installed (ensuring a combustion seal at the front frame), the refrigerator is to be secured in the enclosure with six screws (not included).

Install the six screws in the following order:

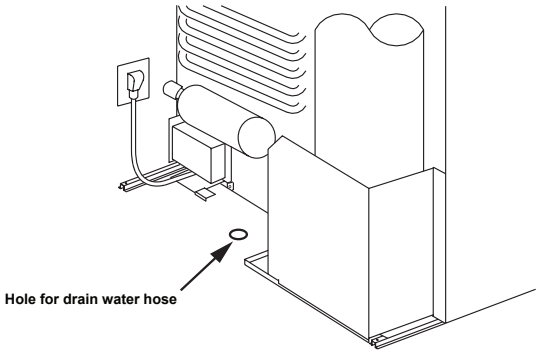
1. Two screws installed through the front base.
2. Two screws installed in the top frame.
3. Two screws installed in the rear base.




The refrigerator is provided with a lower front strip (shipped as a loose part). The front strip is to be attached after the refrigerator is set into the cutout opening.

## DRAIN WATER HOSE

A hole must be drilled through flooring and the installer needs to make sure the hose does not kink when run through the floor. Seal around the hose that goes through the drilled hole. If a longer hose than supplied is required to get the water to drain outside of the vehicle, the installer will have to supply the extra length of hose.




## CONNECTIONS

### Gas connection

Hook up to the gas supply line is accomplished at the manual gas valve, which is furnished with a 3/8" SAE (UNF 5/8" -18) male flare connection. All completed connections should be examined for leaks using a solution of liquid detergent and water.

**⚠ WARNING**

**Be careful when working on or near the gas system. Do not use an open flame to check for gas leaks!**

The gas supply system must incorporate a pressure regulator to maintain a supply pressure of not more than 11 inches water column. When testing the gas supply system at test pressures:

- **> 1/2 psi** - the refrigerator and its individual shutoff valve must be disconnected from the gas supply piping system.
- **≤ 1/2 psi** - the appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve.

If detailed instructions on the installation and connection to the gas supply are required, please contact your dealer or distributor.

### Testing LP gas safety shut off

**NOTE!** The gas safety shut off must be tested after the refrigerator is connected to LP gas supply.

To test the gas safety shut off, follow these steps:

1. Start the refrigerator and switch to GAS mode.
2. Check that the gas flame is lit and the GAS mode indicator lamp is on.
3. Close the manual gas shutoff valve at the back of the refrigerator.
4. Wait for one minute. The CHECK indicator lamp should be lit and the GAS mode indicator lamp should be off.
5. Remove the protection cover. Open the manual gas shutoff valve. Do not change any button positions on the control panel.
6. Apply a non corrosive commercial bubble solution to the burner jet orifice. No bubbles should appear at the opening of the burner jet orifice. The presence of bubbles indicates a defective gas safety shutoff, and service is required.
7. If no bubbles were present at the burner jet orifice, it should be rinsed with fresh water. Be careful not to damage the burner jet orifice.
8. Replace the cover.
9. Turn off the refrigerator by pressing the ON/OFF button and then, turn it back on. Normal operation of the burner should return. Allow the burner to operate for a minimum of five minutes.

# INSTALLATION INSTRUCTIONS

## Electrical connection

### 120 V AC connection

The refrigerator is equipped with a grounded three-prong plug for your protection against shock hazards. It should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug!

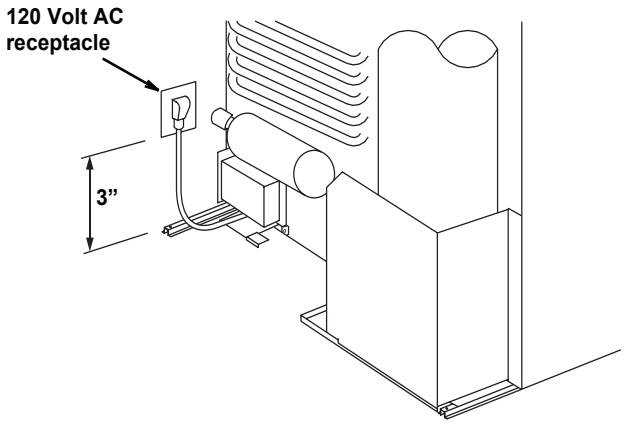
The free length of the cord is 2 feet and therefore recommended that the receptacle be located to the left side (opposite side of refrigerator burner assembly) of the refrigerator (viewed from the rear). The receptacle should be 3" (from the bottom of the plastic receptacle) above the refrigerator mounting floor. This allows easy access through the vent door. The cord should be routed to avoid direct contact with the burner cover, flue cover or any other components that could damage the cord insulation.

### 12 V DC connection

This refrigerator model is not designed for 12 V DC operation of the cooling system; however, a continuous 12 V DC must be supplied to the refrigerator to operate the controls.

Use a minimum of a 14 gauge wire between the battery and refrigerator to supply the control voltage. The connection is made to the positive (+) and negative (-) terminals located at the rear of the refrigerator. Correct polarity must be observed when connecting to the DC supply.

**NOTE!** Do not use the chassis or vehicle frame as one of the conductors. Connect two wires at the refrigerator and route to the DC supply.




# REFRIGERATOR REMOVAL

Before removing the refrigerator:

- Verify that the AC and DC voltage leads are disconnected.
- Shut off the gas supply.
- Disconnect the gas supply line at the rear of the refrigerator. Always use a back up wrench when loosening and tightening connections.

To remove the refrigerator, follow these steps:

1. Cap the gas supply line.
2. Loosen the screws anchoring the refrigerator to the enclosure.
3. Slide the refrigerator out of the compartment.

When replacing the refrigerator make sure that the sealing strips are properly positioned. Check all connections for gas leaks. Replacement is the reverse of removal.

# MOUNTING INSTRUCTIONS

## INSTALLING THE DOOR PANELS

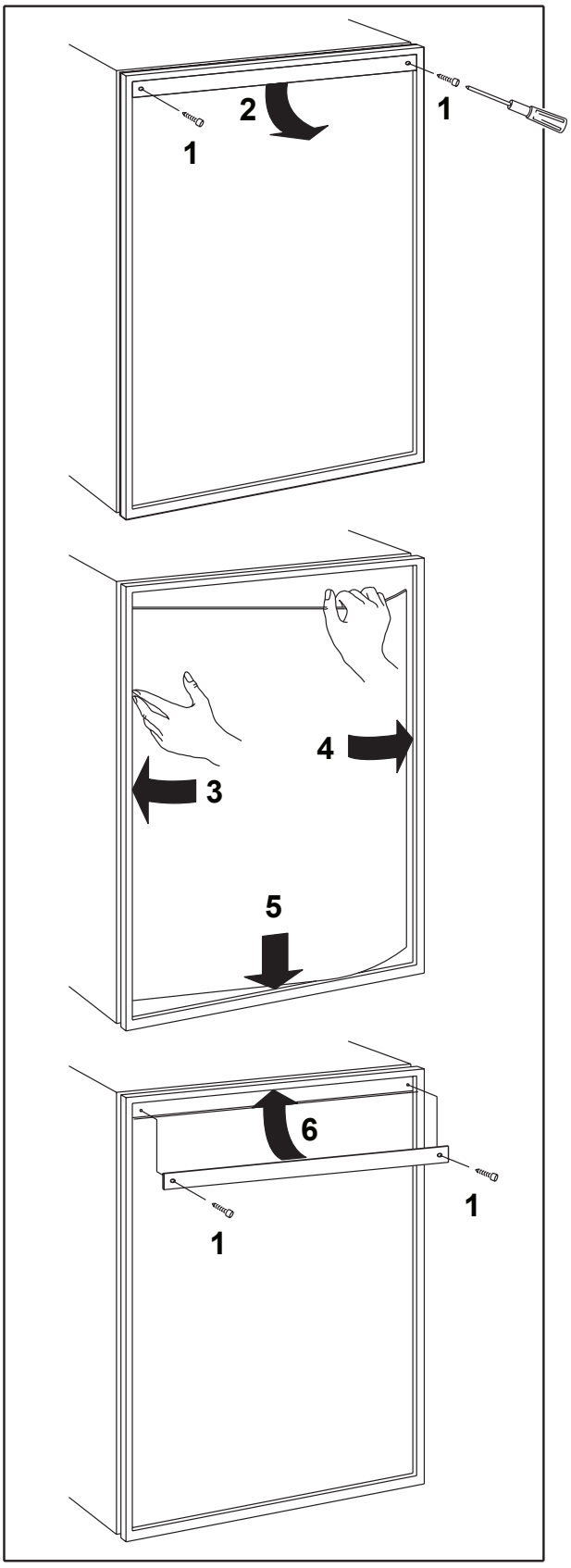
The refrigerator is normally delivered without door panels. Before starting the mounting work, read this instruction thoroughly and check that the panel dimensions are in compliance with those given in the “Panel dimensions” table.

**Panel dimensions**
**max. thickness 5/32" (4 mm)**

| Refrigerator model | | Height max | Height min | Width max | Width min |
|---|---|---|---|---|---|
| **RM2620** | | | | | |
| upper | mm | 306 | 304 | 515 | 513 |
| | inch | 12-3/64 | 11-31/32 | 20-9/32 | 20-13/64 |
| lower | mm | 819 | 817 | 515 | 513 |
| | inch | 32-1/4 | 32-5/32 | 20-9/32 | 20-13/64 |
| **RM2820** | | | | | |
| upper | mm | 378 | 376 | 563 | 561 |
| | inch | 14-7/8 | 14-51/64 | 22-11/64 | 22-3/32 |
| lower | mm | 897 | 895 | 563 | 561 |
| | inch | 35-5/16 | 35-15/64 | 22-11/64 | 22-3/32 |

To install the door panels, follow these steps:

1. Open the door 90 degrees.
2. On new refrigerators, the decoration strips are taped inside the door; if installed on the door, remove the door decoration strip (2) by removing its two screws (1).
3. Insert one vertical edges into the groove of the door frame (3).
4. Bend the panel gently so that the free side of the panel can be slipped into the corresponding groove of the door frame (4).
5. Slide the panel down into the groove of the bottom frame (5).
6. Put the decoration strip across the door so that the gap between the upper edge of the panel and the door frame is covered and then, push it upward (6). The tabs on the inside of the strip should fit behind the flange of the door frame.
7. Secure the decoration strip with the two screws removed in step 1.



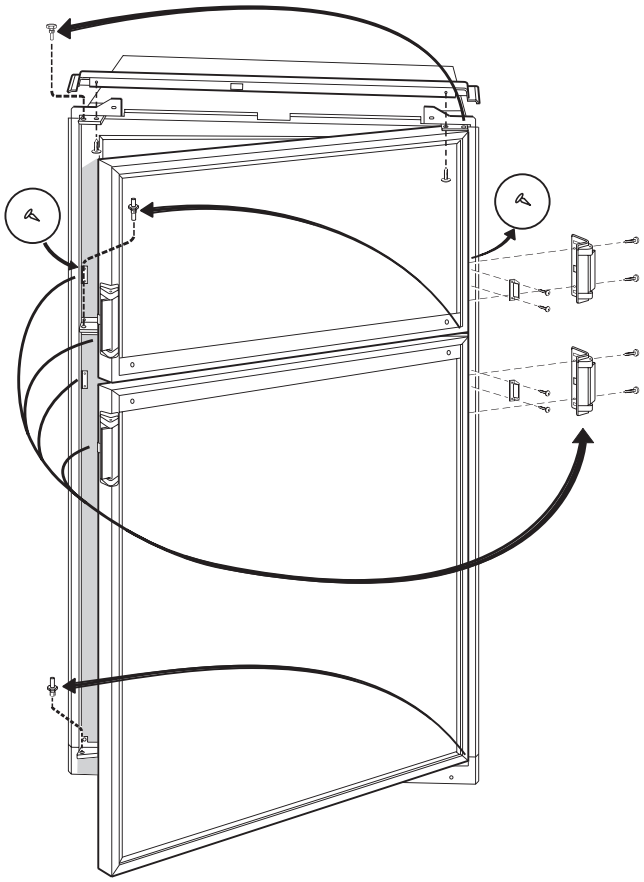
# MOUNTING INSTRUCTIONS

## REVERSING THE DOOR SWING

The refrigerator is equipped with hinges that makes it possible to change the direction the door opens by moving the hinges to the opposite side.

To change the door hinges from one side to the other, follow these steps:

1. Open the top door and remove the two screws holding the top decoration. The screws are accessible from beneath.
2. Remove the top hinge pin and lift out the top door.
3. Remove center hinge pin and lift out the lower door.
4. Unscrew the bottom hinge pin.
5. Remove the plastic cap from the opposite lower hinge and place it in the hole just “left empty” by the lower hinge pin.
6. Screw the lower hinge pin in the hole from which the plastic cap was removed.
7. Before replacing the doors on the refrigerator, remove the catches and move them to the opposite side of the cabinet. The holes are covered with plastic caps that must be removed and inserted in the holes that previously held the catches.
8. Unscrew the handles and move them to the opposite side of the door.
9. Insert the plastic caps into the holes left open on the doors. (Plastic caps for empty holes are in the parts bag inside the refrigerator.)
10. Remount the doors and hinge pins in the reverse order of their removal.
11. Before the top decoration is refitted, check that the door closes easily and the gasket seals well on all sides.



# REFRIGERATOR OVERVIEW

## ABSORPTION COOLING SYSTEM

In an absorption refrigerator system, ammonia is liquefied in the finned condenser coil at the top rear of the refrigerator. The liquid ammonia then flows into the evaporator (inside the freezer section) and is exposed to a circulating flow of hydrogen gas, which causes the ammonia to evaporate, creating a cold condition in the freezer.

**When starting this refrigerator for the very first time, the cooling cycle may require up to four hours of running time before the cooling unit is fully operational.**

The tubing in the evaporator section is specifically sloped to provide a continuous movement of liquid ammonia, flowing downward by gravity through this section.

Sodium chromate is used for corrosion protection (less than 2 weight % of the coolant).

### Leveling the refrigerator

Leveling is one of the requirements for proper operation with absorption refrigerators. to ensure proper leveling the vehicle needs to be leveled only so it is comfortable to live in (no noticeable sloping of floor or walls).

Any time the vehicle is parked for several hours with the refrigerator operating, the vehicle should be leveled to prevent this loss of cooling.

If the refrigerator is operated when it is not level and the vehicle is not moving, liquid ammonia will accumulate in sections of the evaporator tubing. This will slow the circulation of hydrogen and ammonia gas, or in severe cases, completely block it, resulting in a loss of cooling.

When the vehicle is moving, the leveling is not critical, as the rolling and pitching movement of the vehicle will pass to either side of level, keeping the liquid ammonia from accumulating in the evaporator tubing.

## THERMOSTAT

The thermostat controls both the gas and electric operation, thereby eliminating the necessity of resetting each time a different energy source is employed. After the initial start-up, the thermostat should be adjusted to the desired temperature setting, usually about mid setting.

## CONTROL SYSTEM

The refrigerator is equipped with a semi Automatic Energy Selector (AMES) control system, which can be set to automatically select either 120 V AC or LP gas operation (AUTO mode), or if desired LP gas only (GAS mode). The refrigerator controls will work down to 9.6 volt DC.

This control system contains a feature where it will continue to operate the cooling system in the event of a failure of a major operating component. Two different modes of operation can occur in this category:

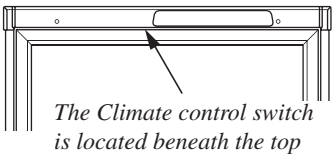
1) The first limp mode of operation will execute if the display module becomes non functional. The control system will revert to full automatic operation selecting the best energy source available with AC, GAS priority. The temperature setting will be maintained at the mid position. The power module will continually attempt to reestablish operation of the display module.

2) The second limp mode of operation will execute when a failure of the temperature sensing device or associated electronic circuitry occurs. If this should happen, the control system will operate on the energy source selected via the control panel. The cooling unit will run continuously on the selected energy source. The refrigerator will continue to operate in this mode indefinitely or until a new sensor is installed and the system is reset.

## CLIMATE CONTROL SYSTEM

During the summer months of high temperatures and humidity, the metal frame between the freezer and fresh food compartments may have water droplets forming. The number of water droplets will increase if the vehicle isn't air conditioned during these months. The refrigerator comes standard with a 12 V DC climate control that will evaporate the water droplets when they form.

To turn on the climate control, turn the Climate control switch to ON.



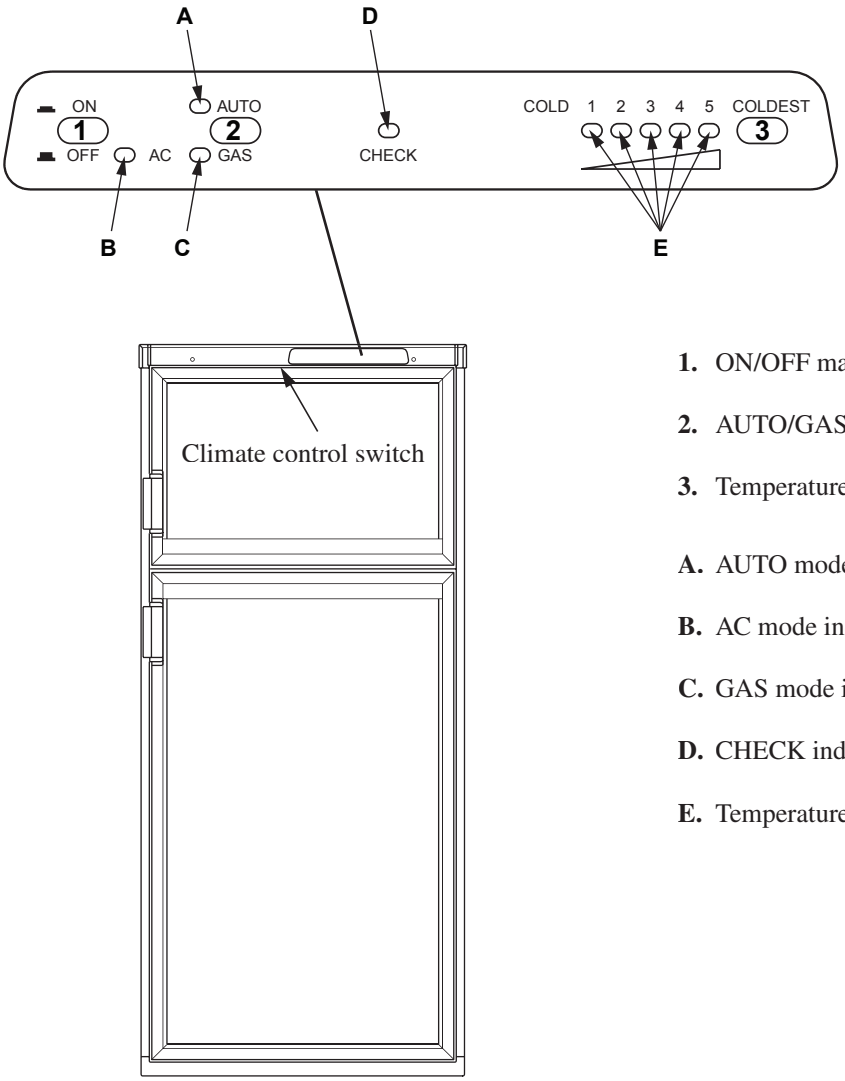
*The Climate control switch is located beneath the top decoration panel that houses the control panel.*

The climate control can be left on continuously or used only when temperatures require it.

**NOTE!** When turned on, the climate control will draw 12 V DC power continuously. Turn it off when a charging source is not available.

# REFRIGERATOR OVERVIEW

## CONTROL PANEL




**1.** ON/OFF main power button

**2.** AUTO/GAS mode selector button

**3.** Temperature selector button

**A.** AUTO mode indicator lamp

**B.** AC mode indicator lamp

**C.** GAS mode indicator lamp

**D.** CHECK indicator lamp (GAS mode only)

**E.** Temperature indicator lamps

## STARTING/SHUTTING OFF THE REFRIGERATOR

### Starting

Before starting the refrigerator:

- Check that all the manual gas valves are in the ON position - including the manual shutoff valve at the rear of the refrigerator.
- Make sure that a continuous 12 V DC supply is available for the electronic control to function.

To turn on the refrigerator, press the ON/OFF button (ON position).

### Shutting off

The refrigerator may be shut off while in any mode of operation.

To turn off the refrigerator, press ON/OFF button (OFF position). This shuts off all DC power to the refrigerator, including the interior light.

If the refrigerator will not be in operation for a period of weeks, it should be emptied, defrosted, cleaned and the doors left ajar. The ice trays should also be dried and kept outside the cabinet

## SELECTING AUTO MODE - GAS MODE

### Auto mode

When operating in the AUTO mode, the AUTO mode indicator lamp (A) will illuminate. The control system will automatically select between AC and GAS operation with AC having priority over GAS. Either the AC indicator lamp (B) or the GAS indicator lamp (C) will illuminate depending on the energy source selected by the control system. If the control system is operating with AC energy and it then becomes unavailable, the system will automatically switch to GAS. As soon as AC becomes available again the control will switch back to AC regardless of the status of GAS operation.

To select AUTO mode, follow these steps:

1. Press the AUTO/GAS mode selector button. The AUTO lamp will illuminate.
   - If 120 volts AC is available, the AC mode indicator lamp will illuminate indicating AC operation.
   - If 120 volts AC is *not* available, the GAS mode indicator lamp will illuminate and the control system will automatically switch to GAS operation.
2. If the CHECK indicator lamp illuminates and the GAS mode indicator lamp is off, the controls have failed to ignite the burner in the GAS mode. GAS operation may be reset by pressing the main power ON/OFF button off and then back on again.
3. Adjust the thermostat. Press the Temperature selector button until the lamp at the desired setting is illuminated.

**⚠ WARNING**

**Most LP gas appliances used in recreational vehicles are vented to the outside of the vehicle. When parked close to a gasoline pump, it is possible that the gasoline fumes could enter this type of appliance and ignite from the burner flame, causing a fire or an explosion!**

**When refueling, shut off all LP gas appliances which are vented to the outside!**

### Gas mode

When operating in the GAS mode, the AUTO mode indicator lamp (A) will be off and the GAS mode indicator lamp (C) will be illuminated. This mode provides LP gas operation only.

To select GAS mode, follow these steps:

1. Press the AUTO/GAS mode selector button to turn off the AUTO lamp. The GAS mode indicator lamp will illuminate. Within 45 seconds the burner should be ignited and operating normally.
   - On the initial refrigerator start-up it may take longer than 45 seconds to allow air to be purged from the gas line.
   - If the gas does not ignite within 45 seconds the CHECK indicator lamp will illuminate and the GAS mode indicator lamp will go off.
   - To reset when the CHECK indicator lamp is illuminated, press the ON/OFF button off and then back on again.
   - Do not continue to reset GAS operation if the CHECK indicator lamp continues to be illuminated after several tries.
2. Adjust the thermostat. Press the Temperature selector button until the lamp at the desired position is illuminated.

#### Purging air from the lines

If the refrigerator has not been used for a long time or the LP tanks have just been refilled, air may be trapped in the supply lines. To purge the air from the lines may require resetting the main power ON/OFF button three or four times.

If repeated attempts fail to start the LP gas operation, check to make sure that the LP gas supply tanks are not empty and all manual shutoff valves in the lines are open. If the problem persists, contact a service center for assistance.

If the control is switched to AC operation while the CHECK indicator lamp is on, it will function properly, but the CHECK indicator lamp will not go off until the main power ON/OFF button is pressed off and then back on again.

# STORAGE COMPARTMENTS

**⚠ WARNING**

**DO NOT store explosive substances in the refrigerator, such as cigarette lighter gas, gasoline, ether or the like.**

## REFRIGERATOR VOLUME

| | |
|---|---|
| RM2620 | 6 cu.ft |
| RM2820 | 7.7 cu.ft |

## FOOD STORAGE COMPARTMENT

Cool the refrigerator before placing any food inside. The food storage compartment is completely closed and unventilated, which is necessary to maintain the required low temperature for food storage. Consequently, foods having a strong odor or those that absorb odors easily should be covered. Vegetables, salads etc. should be covered to retain their crispness.

The coldest positions in the refrigerator are under the cooling fins and at the bottom of the refrigerator. The warmer areas are on the upper door shelves. This should be considered when placing different types of food in the refrigerator.

Arrange all food in the unit to allow for free air circulation. Do not overpack because a stuffed refrigerator must work harder and will have higher cabinet temperatures.

Never put hot food or drinks into the refrigerator - cool them first.

Do not leave the unit's door open any longer than necessary. This will reduce frost formation and increase the efficiency of the refrigerator.

## FROZEN FOOD STORAGE COMPARTMENT

This compartment is not designed for deep or quick freezing of food. To prevent food from drying out, keep it in covered dishes, containers, plastic bags or wrapped in aluminum foil.

- Quick frozen soft fruits and ice cream should be placed in the coldest part of the compartment, which is on or just below the freezer shelf.
- Frozen vegetables, may be stored in any part of the compartment.
- Meat or fish, whether raw or prepared, can be stored in the frozen food storage compartment provided they are precooled first in the refrigerator. They can be stored about three times longer in the frozen food compartment as compared to the fresh food compartment.

### Ice cubes

Ice cubes can be made in the freezer compartment. Place the trays in direct contact with the bottom of the freezer compartment. Ice will be made more rapidly if the thermostat is set at its highest position, but be sure to move the thermostat back to normal setting when the ice is formed; the refrigerator might otherwise become too cold.

# PRODUCT CARE

## DEFROSTING

1. Shut off the refrigerator by pressing the main power ON/OFF button to the OFF position.
2. Empty the refrigerator.
3. Leave the cabinet and freezer doors open and place the drip tray under the finned evaporator. Defrosting time can be reduced by filling the ice trays with hot water and placing them in the freezer compartment.

**⚠ CAUTION**

**Do not use:**

- **A knife or an ice pick, or other sharp tools to remove frost from the freezer shelves. It can create a leak in the ammonia system.**
- **A hot air blower. Permanent damage could result from warping the metal or plastic parts.**

4. When all the frost has melted, dry the interior of the refrigerator with a clean cloth.
5. Replace the food. Set the thermostat to the coldest setting for a few hours. Then, reset the thermostat to the desired setting, usually at mid setting.

## CLEANING

It is important to always keep refrigerator clean. Cleaning the refrigerator is usually done after it is defrosted or put into storage. To clean the interior liner of the refrigerator, use lukewarm weak soda solution. Use warm water only to clean the finned evaporator, gasket, ice tray and shelves.

**NOTE!** Never use strong chemicals or abrasives to clean these parts, as the protective surfaces will be damaged. Do not spray liquids near electrical outlets, connections or the refrigerator components.

In order to keep the refrigerator operating efficiently and safely, periodic inspection and cleaning of several components once or twice a year is recommended:

- Check the lower vent, upper vent and area between these openings for any obstructions such as bird/insect nests, spider webs, etc.
- Clean the coils on the back of the refrigerator. Use a soft bristled brush to dust off the coils.
- Check to make sure that the refrigerator area is free from combustible material, gasoline and other flammable vapors or liquids.

# MAINTENANCE & SERVICE

**Service must be done on a regular schedule to keep the refrigerator operating properly. Refer all servicing to qualified service personnel.**

## ELECTRIC EQUIPMENT

### Cartridge heater

The heat necessary for the operation of an absorption cooling unit is supplied by an electric heater mounted in a pocket of the boiler system. The refrigerator is equipped with one electrical heater for 120 V AC.

To replace the heater, follow these steps:

1. Disconnect the wall plug, and the 12 volt wires.
2. Remove the protection cover.
3. Remove the power module cover.
4. Disconnect the heater leads.
5. With a pair of pliers, unfold the lug holding the lid of the boiler casing and then, open the lid.
6. Remove some insulation wool so that the heater is accessible.
7. Turn and lift the heater out of its pocket.
8. Fit the new heater into the pocket.
9. Connect the leads and put back the power module cover.
10. Put the insulation wool back and then, close the lid of the boiler.
11. Put back the protection cover.

### Fuses

The refrigerator is equipped with 2 fuses. One fuse for the refrigerator control system (3A) and one for the AC cartridge heater (5A).

To replace the fuses, follow these steps:

1. Disconnect the wall plug and the 12 volt wires.
2. Remove the power module cover.
3. Snap the fuse out of the fuse holder.
4. Fit the new fuse in to the fuse holder.
5. Replace the power module cover.

## CHECKING THE CONNECTIONS

**⚠ WARNING**

**Do not use an open flame to check for gas leaks!**

1. Make sure the LP gas supply is turned on.
2. Check all connections in the LP gas system for gas leaks.
3. Apply a non-corrosive bubble solution to all LP gas connections. The appearance of bubbles indicates a leak and should be repaired *immediately*!

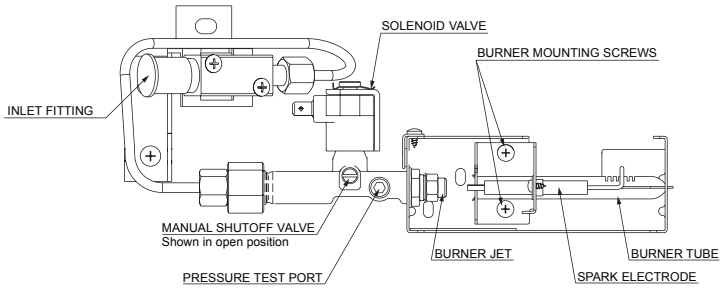
## CHECKING THE CONTROL SYSTEM

Check the AMES control system by connecting/disconnecting the 120 V AC power, starting/stopping the engine, etc.

## CHECKING THE LP GAS PRESSURE

The LP gas pressure should be checked and readjusted if necessary. The correct operating pressure is 11 inches of water column. Measure the LP gas pressure at the test port, just ahead of the burner jet.

**Gas equipment assembly**



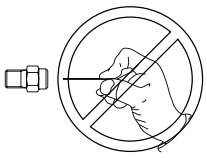
## CLEANING THE FLUE BAFFLE AND BURNER

Inspect the flue baffle. It should be reasonably clean and free of soot. Heavy soot formation indicates improper functioning of the burner. The flue and burner require cleaning in the following manner:

1. Unplug the refrigerator power cord from the 120 V AC outlet.
2. Disconnect or shut off the 12V DC power to the refrigerator.
3. Turn off the manual shutoff valve.
4. Remove the cover from the burner housing.
5. Disconnect the wire form the high voltage electrode.
6. Remove the burner mounting screws and then, remove the burner assembly.
7. Remove flue cap from the top of the flue tube. Lift out the wire and spiral baffle. Using a flue brush, clean the flue from the top. (Blowing compressed air into the flue will *not* properly clean soot and scale out of the flue tube.)
8. Replace the flue baffle.
9. Clean the burner tube with a brush. Blow out the burner with compressed air.
10. Before removing the burner jet:
    - Clean burner area of soot and scale that fell out of flue tube.
    - Remove the burner jet.
    - Soak the jet in wood alcohol and blow it out with compressed air.
    - Reinstall and tighten the burner jet.

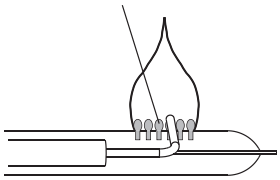
**⚠ WARNING**

**Do not use a wire or pin when cleaning the burner jet as damage can occur to the precision opening. This could be extremely hazardous!**

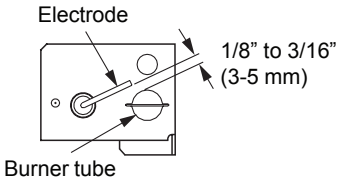


11. Carefully reinstall the burner. Make sure that the end of the burner fits into the slot on the burner bracket. Verify that the slots are centered under the flue tube and the thermocouple is positioned properly (tip of thermocouple extends over two slots of burner).

*The color of the flame should be clear blue over the slots of the burner.*



12. Be sure to reconnect the wire to the high voltage electrode. Check the electrode for proper location and gap.




13. Turn on the manual gas shutoff valve. Using a solution of liquid detergent and water, examine the gas supply line and all the gas connections for leaks.
14. Connect the 120 V power cord to the outlet. Reconnect or turn on the 12 V DC power.
15. Check the LP gas safety shutoff.

# TROUBLESHOOTING

If you run into a problem, refer to the troubleshooting table below.

| Symptom | Check/Remedial action |
|---|---|
| Refrigerator or freezer is not cold enough | • Is the plug firmly connected to the socket? Is the socket switched on? Check the socket by plugging in another appliance.<br>• Is the thermostat properly set?<br>• Is the refrigerator level? Because of its operation it is important to keep an absorption refrigerator level.<br>• Heavy frost build-up on evaporator fins? To prevent frost buildup, which can reduce efficiency, do not leave the unit's door open longer than necessary.<br>• Has the overheating protection been triggered or not? (Must be checked by an authorized service technician.)<br>• Is there a power failure? Are the fuses are intact for the AC supply and control system?<br>• Has the door been closed properly causing the inside temperature to rise to quickly?<br>• Overpacked refrigerator? The unit will have to work harder if the refrigerator is stuffed and results in higher cabinet temperatures. Arrange the food in the unit to allow for free air circulation.<br>• Is the burner dirty, damaged or not properly located under the flue tube?<br>• Is the burner jet clogged?<br>• Is the flue baffle inserted properly in the flue tube?<br>• Is the LP gas pressure low at burner?<br>Set the main regulator to regulate the pressure so it does not drop below 11 inches water column at pressure tap.<br>• Odors from fumes:<br>- Dislocated burner<br>- Damaged burner<br>- Dirty flue tube |
| The refrigerator does not work in gas operation mode | • Gas bottle empty?<br>Change the gas bottle<br>• Air in the gas pipe?<br>Remove the air by switching the refrigerator on and off 3-4 times. |
| The refrigerator does not work on 120V AC | • Defective fuse?<br>Fit a new fuse.<br>• Connection to supply voltage?<br>Establish power connection. |

The refrigerator is quality-guaranteed but we are not responsible for any failures caused by improper adjustments. If the refrigerator is still not working properly, contact your nearest Service Center. State the problem, product-, model- and serialnumber. These details are stated on the data label inside the compartment.

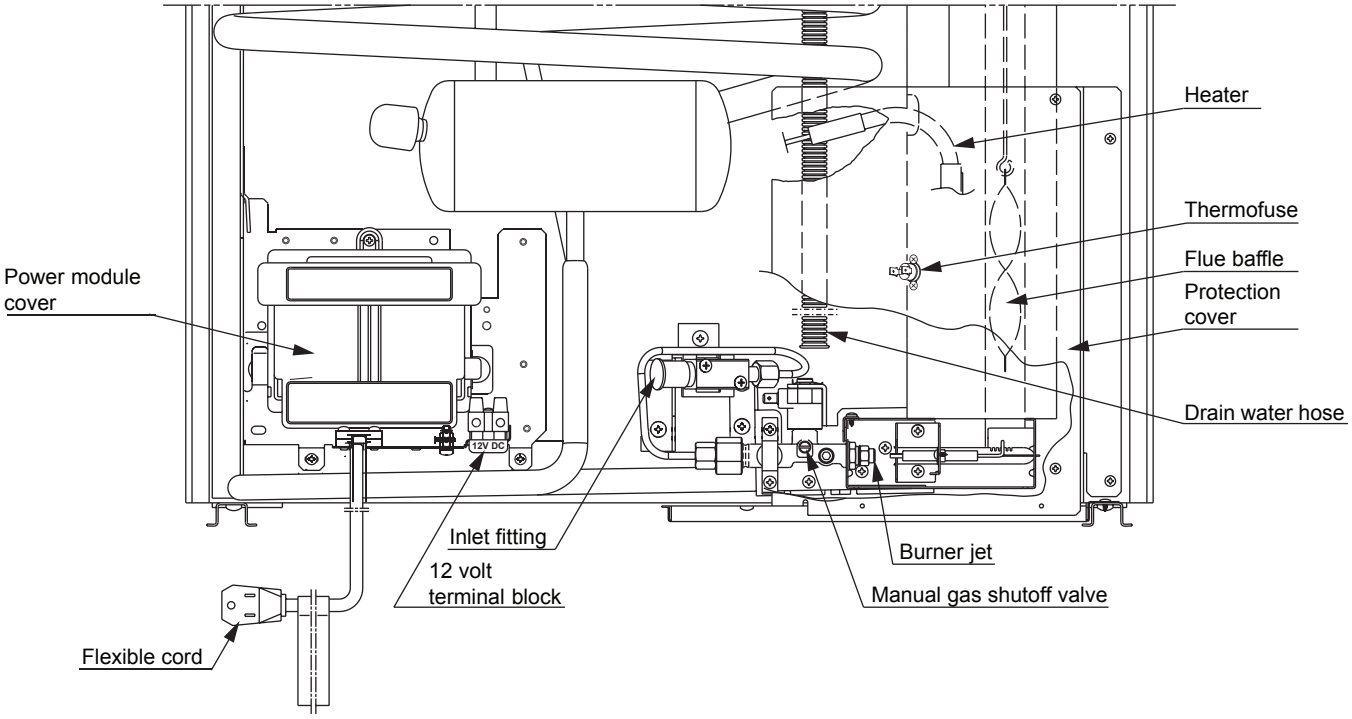
# APPENDIX A - SPARE PARTS

A list of commonly used parts, which should be available, if required, from your Dometic Service Center.

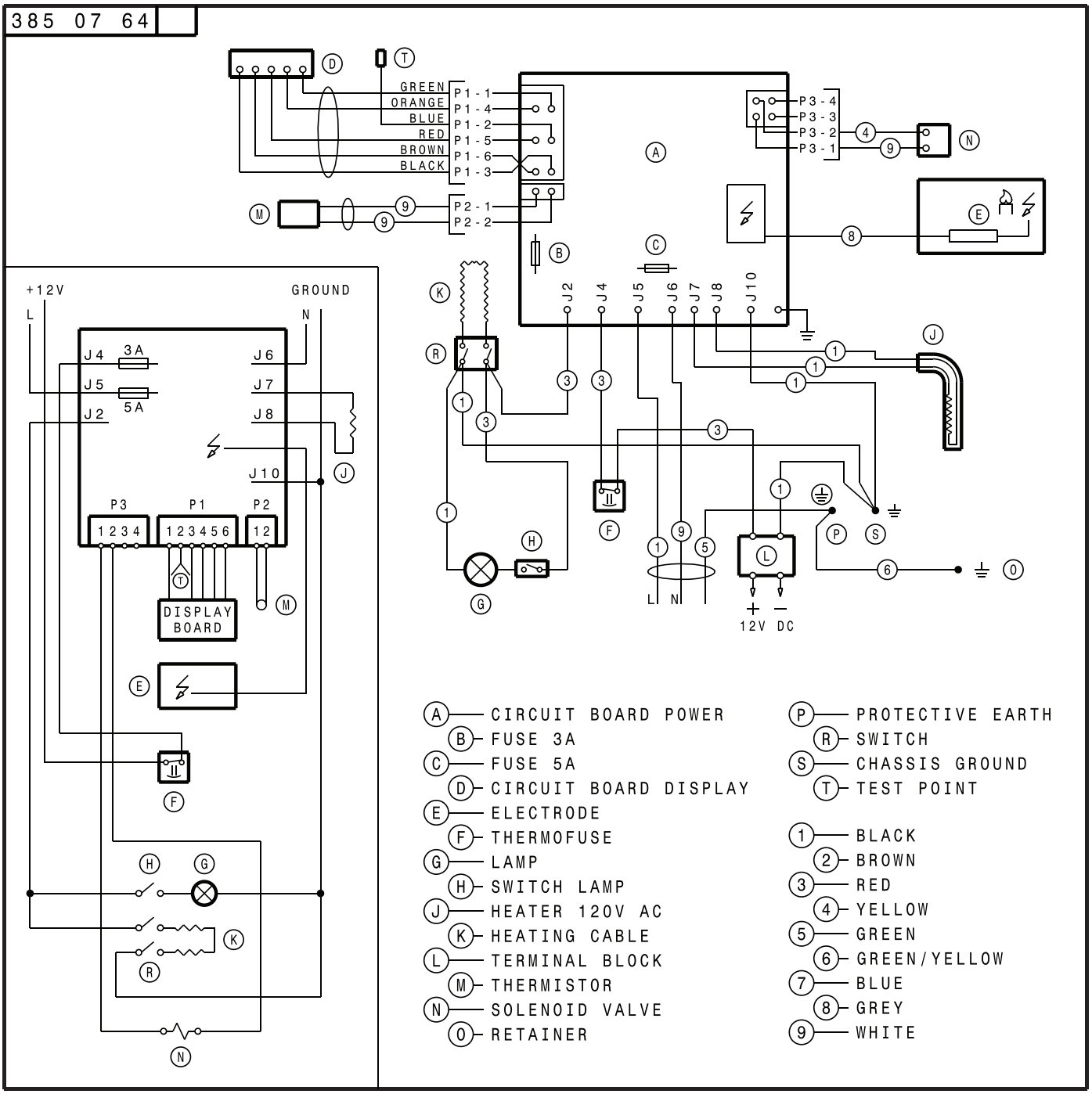
A = RM2620
B = RM2820

| Part No. | Model | Description |
|---|---|---|
| 385 06 44-42/2 | B | Heater, 325W, 120V |
| 385 06 44-41/4 | A | Heater, 295W, 120V |
| 200 05 71-25/3 | A | Door shelf, 4 pieces |
| 200 17 32-18/5 | B | Door shelf, 4 pieces |
| 200 27 26-06/1 | A | Box vegetable |
| 200 27 26-16/0 | B | Box vegetable |
| 200 74 19-20/9 | A | Jet, No. 56 |
| 200 74 19-21/7 | B | Jet, No. 58 |
| 200 75 90-05/8 | A | Baffle |
| 200 75 90-06/6 | B | Baffle |
| 293 06 97-09/5 | A B | Burner, with conductor |
| 293 14 18-03/8 | A B | Door shelf, (freezer) |
| 293 16 00-02/3 | A B | Handle |
| 293 21 06-01/2 | A B | Lamp cover |
| 293 27 81-01/2 | A B | Electrode |

# APPENDIX B - REARVIEW EQUIPMENT



# APPENDIX C - WIRING DIAGRAM



# APPENDIX D - CONSUMER SUPPORT

## Dometic website www.dometicusa.com

Please visit the website for information and news about Dometic products. You can obtain information about how to get in contact, learn about product care, download manuals, leaflets and warranties.

## Service and spare parts

For service, please contact the Service Center Assistance, see the front page of this manual - or - visit the Dometic website to find the location of the nearest Dometic Service Center.

Commonly used spare parts are listed in this manual, see APPENDIX A - SPARE PARTS. These should be available from your Dometic Service Center.

## Contact us

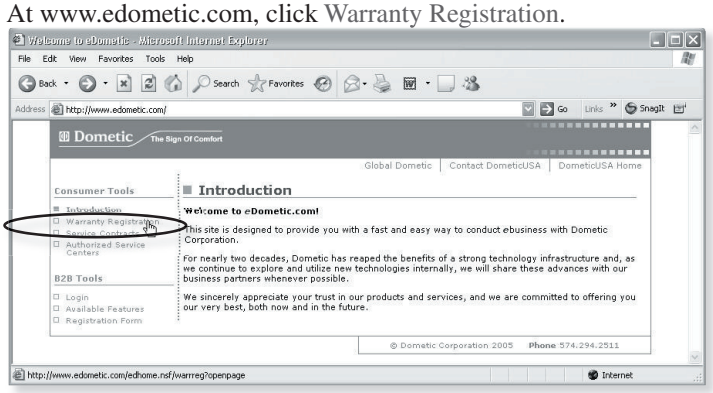
For contact information, please see the frontpage of this manual - or - visit the Dometic website.

## Register the appliance www.edometic.com

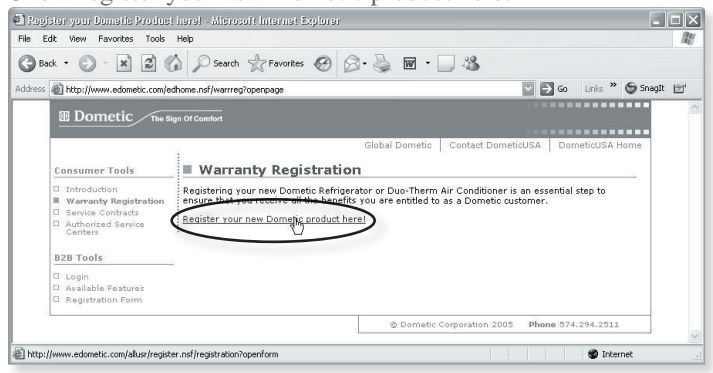
Timely registration will allow for enhanced communication and service under the terms of the warranty, see APPENDIX E - DOMETIC WARRANTY & MAINTENANCE SCHEDULE.
To register the appliance, fill in the pre-printed registration card on the last page of this manual or register on-line at the Dometic website www.edometic.com.

To register on-line, follow these steps:

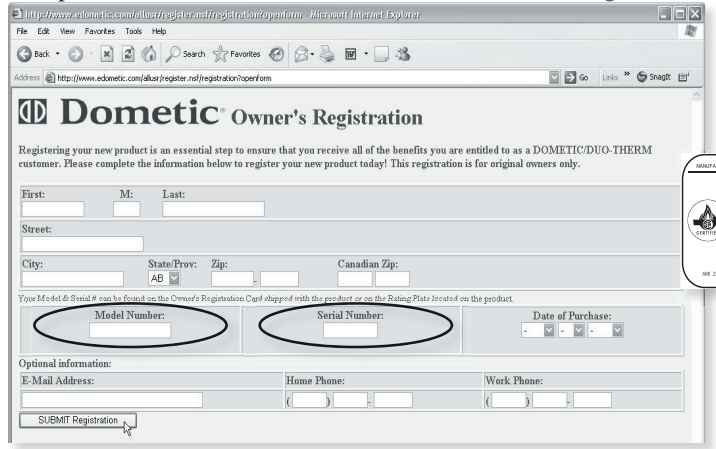
1. At www.edometic.com, click Warranty Registration.

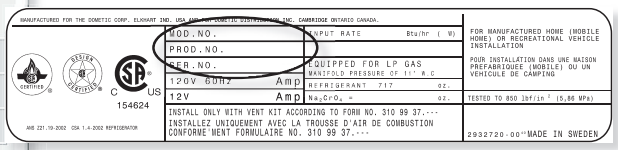

Welcome to eDometic - Microsoft Internet Explorer
Dometic
The Sign Of Comfort
Global Dometic | Contact DometicUSA | DometicUSA Home
Consumer Tools
Introduction
Warranty Registration
Service Contracts
Authorized Service Centers
B2B Tools
Login
Available Features
Registration Form
Introduction
Welcome to eDometic.com!
This site is designed to provide you with a fast and easy way to conduct ebusiness with Dometic Corporation.
For nearly two decades, Dometic has reaped the benefits of a strong technology infrastructure and, as we continue to explore and utilize new technologies internally, we will share these advances with our business partners whenever possible.
We sincerely appreciate your trust in our products and services, and we are committed to offering you our very best, both now and in the future.
© Dometic Corporation 2005 Phone 574.294.2511
http://www.edometic.com/edhome.nsf/warrreg?openpage
Internet

2. Click Register your new Dometic product here.


Register your Dometic Product here! - Microsoft Internet Explorer
Dometic
The Sign Of Comfort
Global Dometic | Contact DometicUSA | DometicUSA Home
Consumer Tools
Introduction
Warranty Registration
Service Contracts
Authorized Service Centers
B2B Tools
Login
Available Features
Registration Form
Warranty Registration
Registering your new Dometic Refrigerator or Duo-Therm Air Conditioner is an essential step to ensure that you receive all the benefits you are entitled to as a Dometic customer.
Register your new Dometic product here!
© Dometic Corporation 2005 Phone 574.294.2511
http://www.edometic.com/allusr/register.nsf/registration?openform
Internet

3. Complete the information and then, click the Submit Registration button.


Dometic Owner's Registration
Registering your new product is an essential step to ensure that you receive all of the benefits you are entitled to as a DOMETIC/DUO-THERM customer. Please complete the information below to register your new product today! This registration is for original owners only.
First:
M:
Last:
Street:
City:
State/Prov:
Zip:
Canadian Zip:
Your Model & Serial # can be found on the Owner's Registration Card shipped with the product or on the Rating Plate located on the product.
Model Number:
Serial Number:
Date of Purchase:
Optional information:
E-Mail Address:
Home Phone:
Work Phone:
SUBMIT Registration


MOD.NO.
PROD.NO.
SER.NO.
120V 60Hz Amp
12V Amp
154624
EQUIPPED FOR LP GAS
INSTALL ONLY WITH VENT KIT ACCORDING TO FORM NO. 310 99 37.---
INSTALLEZ UNIQUEMENT AVEC LA TROUSSE D'AIR DE COMBUSTION CONFORME MENT FORMULAIRE NO. 310 99 37.---
FOR MANUFACTURED HOME (MOBILE HOME) OR RECREATIONAL VEHICLE INSTALLATION
POUR INSTALLATION DANS UNE MAISON PREFABRIQUÉE (MOBILE) OU UN VEHICULE DE CAMPING
2932720-00**MADE IN SWEDEN

The model number (e.g. RM3762) and serial number ( e.g. 012 34567) are stated on the data label in the refrigerator compartment.

# IMPORTANT!

## Valuable Dometic Refrigerator Warranty & Maintenance Schedule

Congratulations, and Thank You for purchasing the industry's best built and best backed RV Refrigerator. Enclosed you will find important warranty and maintenance information on Dometic's exclusive three (3) year warranty. Please take a few moments and familiarize yourself with the program. We at Dometic appreciate your business and are confident that you will have many years of trouble-free RV enjoyment.

# LIMITED THREE-YEAR WARRANTY
# DOMETIC REFRIGERATORS

## THE SELLER NAMED BELOW MAKES THE FOLLOWING WARRANTY WITH RESPECT TO THE DOMETIC PRODUCT:

1. This warranty is made only to the first purchaser (herein after referred to as the "Original Purchaser") who acquires the product for his own use and is installed and operated within the continental United States and Canada.
2. This warranty will be in effect for three years on parts and freight and two years on labor from the date of purchase by the Original Purchaser. It is suggested that the original purchaser retain a copy of the dated bill of sale as evidence of the date of purchase.
3. This warranty covers only specified parts, which shall be free from defects in material and workmanship under normal use. This warranty does not cover conditions unrelated to the material and workmanship of the product. Such unrelated conditions include, but are not limited to: (a) damage not reported within the first 7 days of ownership; (b) faulty installation or installation that does not comply with RVIA standards, and any damage resulting from such; (c) the need for normal maintenance and any damage resulting from the failure to provide such maintenance; (d) failure to follow Sellers instructions for use of product; (e) any accident to or misuse of any part of this product and any alteration by anyone other than the Seller or its authorized representative; (f) any non-Dometic parts that are installed as replacement parts will void any warranty (implied or written); (g) blow out conditions; (h) radio frequency interference and electromagnetic interference; (i) 12V system chassis ground decay and corrosion; (j) puncture of foam cabinet or vacuum insulated panels after acknowledged receipt; (k) animal or insect infiltration which damages unit or inhibits performance; (l) abuse or misuse of electrical components.
4. The specified parts covered by this warranty are as follows: Major components (cooling unit, LP gas valve, burner, burner housing, electronic display, electronic module, evaporator fins, foam integrity, frame, thermister, spark probe, ignition wire, icemaker compressor, second absorption loop, display escutcheon, lower toe plate, humidity switch, frame heater mullion, icemaker mullion) are covered for parts and freight for three years and labor for two years from date of purchase. All other components that fail must be reported within the first 90 days of ownership in order to receive coverage of parts, freight and labor under warranty.
5. **This warranty requires the Original Purchaser to provide preventative maintenance on a yearly basis, starting at the anniversary of his date of purchase.** The Original Purchaser must keep a record of the preventative maintenance to keep the warranty in effect. Failure of the Original Purchaser in providing this annual maintenance may void the warranty. The preventative maintenance must be performed at a Dometic Authorized Service Center/Dealer. The preventative maintenance required is an inspection, cleaning and full diagnostics performed on the entire electronic system, burner assembly, wiring and cooling unit. A copy of the receipt covering the maintenance checks must accompany the warranty claim during the second and third year of ownership. The cost of this preventative maintenance is the Original Purchaser's responsibility and should take about one hour.
6. In order to obtain the benefits of this warranty, the original purchaser must return the product which is found defective to the Seller named below or to a Dometic Authorized Service Center during the period that this warranty is in effect. The original purchaser is responsible for all charges incurred in delivery of the product to the Seller or Dometic Authorized Service Center, and in pick up after the warranty service has been completed. To obtain the location of the nearest Authorized Service Center, please call 1-800-544-4881 or in Canada call 1-519-720-9578.
7. Any item returned in the manner described in paragraph 6 will be examined by the Seller or the Authorized Dometic Service Center. If it is found that the returned item was defective in material and workmanship, the Seller or the Authorized Dometic Service Center will repair the product per the terms outlined in paragraph 4. CONFIRM THE SERVICE AGENCY IS AN AUTHORIZED DOMETIC SERVICE CENTER. DO NOT PAY THE SERVICE AGENCY FOR WARRANTY REPAIRS. SUCH PAYMENTS WILL NOT BE REIMBURSED.
8. The Seller does not authorize any person or company to create any warranty obligations or liability on their behalf. This warranty is not extended by the length of time which you are deprived of the use of the product. Repairs and replacement parts provided under the terms of this warranty shall carry only the non-expired portion of this warranty.
9. In no event shall either seller be liable for incidental or consequential damages. This includes any damage to another product or products resulting from such a defect. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply.
10. Any implied warranty, including the implied warranty of merchantability and fitness for any purpose, is limited to the duration of this limited warranty. Some states do not allow limitations on how long an implied warranty can last, so the above limitation may not apply.
11. THIS WARRANTY GIVE SPECIFIC LEGAL RIGHTS, YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. No action to enforce this warranty shall be commenced later than ninety (90) days after the expiration of the warranty period. Claims must be submitted in writing to the Dometic Warranty Department for arbitration.
12. All products (except those specifically built for commercial use) are warranted only when installed on vehicles built to R.V.I.A and C.R.V.A, Z-240 Standards.
13. The Seller reserves the right to change the design of any product without notice and with no obligation to make corresponding changes in products previously manufactured.

**DOMETIC CORPORATION**
Warranty Department
Industrial Parkway
Elkhart, IN 46516
Phone: 574-294-2511
Fax: 574-293-9686

# REFRIGERATOR OWNER MAINTENANCE YEARLY RECORD

**Customer Name:** _____ **Model No.:** _____ **Date of Purchase:** _____
**Address:** _____ **Serial No.:** _____
**City:** _____ **State:** _____ **Zip Code:** _____
**Phone:** _____

## FIRST YEAR

Date: _____
Dealership: _____
_____
Address: _____
_____
City: _____
State: _____ Zip: _____
Phone: _____
Technician: _____

| | |
|---|---|
| Cleaned Burner Assembly: | Yes / No |
| Cleaned/Check All Terminals Connections: | Yes / No |
| Cleaned/Inspect All Ground Connections: | Yes / No |
| Inspect and Test Door Seals: | Yes / No |
| Inspect and Tighten LP Lines: | Yes / No |
| Power Ventilator Installed: | Yes / No |
| *Gas Safety Shutdown in 45 seconds: | Yes / No |

| | ACTUAL | SPEC. RANGE |
|---|---|---|
| Electrode Gap | _____ | 3/16" |
| Thermister Reading | _____ | 7-10,000 ohms @ 32° |
| *D/C Voltage | _____ | 9.5 to 15 volts D/C |
| *A/C Voltage | _____ | 120 Volts ± 10% |
| Thermocouple Reading | _____ | 25-35 Millivolts |
| *Delay Between Modes | _____ | Approx. 5 seconds |

* Use PAL RV Diagnostic Tool for these tests.

**ICEMAKER MODELS**

| | |
|---|---|
| Inspect Water Valve and All Connections: | Yes / No |
| Inspect Heat Tape Switch for Proper Operation: | Yes / No |

## SECOND YEAR

Date: _____
Dealership: _____
_____
Address: _____
_____
City: _____
State: _____ Zip: _____
Phone: _____
Technician: _____

| | |
|---|---|
| Cleaned Burner Assembly: | Yes / No |
| Cleaned/Check All Terminals Connections: | Yes / No |
| Cleaned/Inspect All Ground Connections: | Yes / No |
| Inspect and Test Door Seals: | Yes / No |
| Inspect and Tighten LP Lines: | Yes / No |
| Power Ventilator Installed: | Yes / No |
| *Gas Safety Shutdown in 45 seconds: | Yes / No |

| | ACTUAL | SPEC. RANGE |
|---|---|---|
| Electrode Gap | _____ | 3/16" |
| Thermister Reading | _____ | 7-10,000 ohms @ 32° |
| *D/C Voltage | _____ | 9.5 to 15 volts D/C |
| *A/C Voltage | _____ | 120 Volts ± 10% |
| Thermocouple Reading | _____ | 25-35 Millivolts |
| *Delay Between Modes | _____ | Approx. 5 seconds |

* Use PAL RV Diagnostic Tool for these tests.

**ICEMAKER MODELS**

| | |
|---|---|
| Inspect Water Valve and All Connections: | Yes / No |
| Inspect Heat Tape Switch for Proper Operation: | Yes / No |

# NOTES

# PROTECTION FOR YOUR NEW INVESTMENT

We truly appreciate that you have chosen to purchase a Dometic product for your recreational vehicle and we want to help you protect this wise investment.

We at Dometic back our products with one of the most comprehensive warranties in the industry. Complete the registration card below and mail to us or register your Product on-line at www.edometic.com.

Tape here

**TIME-DATED MATERIAL Please Process Promptly!**

FIRST CLASS POSTAGE REQUIRED

Dometic®

Dometic Processing Center
2320 Industrial Parkway
Elkhart, IN 46516

Tape here

■ **WARRANTY VERIFICATION**
Your prompt registration records your right to protection under the terms and conditions of your warranty.

■ **OWNER CONFIRMATION**
Your completed Owner's registration card serves as confirmation of ownership in the event of product damage or theft.

■ **FACTORY COMMUNICATION**
Returning your card of registering on-line guarantees you will receive product information and specials. Leaving your email address below will allow us to communicate with you quickly and efficiently.

■ **3 PLUS 3 SERVICE CONTRACT**
Returning the card below or registering on-line assures you of an invitation to take advantage of an Optional 3 Plus 3 Full Service Contract which allows you to add up to 3 years of additional warranty coverage.

Return the card within **10** days to ensure your:

- WARRANTY VERIFICATION
- FACTORY COMMUNICATION
- OWNER CONFIRMATION
- 3 PLUS 3 SERVICE CONTRACT

*Fold here. Close with tape.*

**IMPORTANT: Return Within 10 days**

Dometic®

## Owner's Registration Card

Registering your product is an essential step to ensure that you receive all the benefits you are entitled to as a DOMETIC customer. Complete the information below and mail to us or register on-line at www.edometic.com.

**Be sure to include your email address so that we can communicate with you quickly and efficiently. Your address will remain confidential and will not be distribute to third parties.**

**Name** _____

**Address** _____

**City** _____ **Stat/Prov.** _____

**Date of Purchase** ___ ___ ___ **MO** **DAY** **YEAR** **Zip/Postal Code** _____ _____

**Email Address** _____

| REFRIGERATOR MODEL NUMBER | SERIAL NUMBER |
|---|---|
| | |

**TO THE INSTALLER**
PLEASE AFFIX THESE INSTRUCTIONS TO THE REFRIGERATOR

—

**TO THE CONSUMER**
PLEASE RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE